IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Canceled).

Claim 2 (Previously presented): The separator of claim 25,

wherein the shutdown layer is at least one selected from the group consisting of a woven, a nonwoven, a felt, a formed-loop knit and a porous film.

Claim 3 (Previously presented): The separator of claim 25, wherein

the separator is bendable down to a radius of 0.5 mm, and

the carrier is less than 50 μm in thickness.

Claim 4 (Previously presented): The separator according to claim 3, wherein

the carrier is a nonwoven comprising polymeric fibers.

Claim 5 (Previously presented):The separator of claim 25, wherein

the polymeric fibers of the carrier are selected from fibers of the group consisting of polyacrylonitrile, polyester, polyamide and mixtures thereof.

Claim 6 (Previously presented): The separator of claim 25, wherein

the shutdown layer is from 1 to 20 μm in thickness.

Claim 7 (Previously presented): The separator of claim 25, wherein

the shutdown layer comprises at least one material selected from the group consisting of polymers, polymer blends, natural or artificial waxes and mixtures thereof.

Claim 8 (Previously presented): The separator of claim 25, wherein

the shutdown layer consists of a material which has a melting temperature of less than 130°C.

Claim 9 (Previously presented): The separator of claim 25, wherein

the material of the shutdown layer and at least portions of the material of the carrier are identical.

Claims 10-11 (Canceled).

Claim 12 (Previously presented): The process of claim 26, further comprising

treating the porous inorganic nonconductive coating with a hydrophobicing agent before fixing the porous sheet shutdown layer.

Claim 13 (Previously presented): The process of claim 26, further comprising treating the porous inorganic coating with an adhesion promoter before fixing the porous sheet shutdown layer.

Claim 14 (Previously presented): The process according to claim 13,

wherein the sol is a polymeric sol comprising a silane adhesion promoter for the shutdown layer to be applied later.

Claim 15 (Previously presented): The process of claim 13,

wherein the adhesion promoter is a hydrolyzed or nonhydrolyzed functionalized alkyltrialkoxysilane.

Claim 16 (Previously presented): The process of claim 26,

wherein the porous sheet shutdown layer comprises a woven, formed-loop knit, felt, nonwoven or porous film.

Claim 17 (Previously presented): The process of claim 13,

wherein fixing the porous sheet shutdown layer comprises

heating once to a temperature above 50°C and below the melting temperature of the material of the porous sheet shutdown layer so that the shutdown layer are adhered to the separator via the adhesion promoters.

Claim 18 (Previously presented): The process of claim 26,

wherein fixing the porous sheet shutdown layer comprises

heating once to a temperature above the glass transition temperature of the porous sheet shutdown layer to incipiently melt the material without changing the actual shape.

Claim 19 (Previously presented): The process of claim 26,

wherein fixing the porous sheet shutdown layer comprises

laminating the porous sheet shutdown layer to the porous inorganic nonelectroconductive coating.

Claim 20 (Currently amended): The ~~processs~~ process of claim 26,

wherein fixing the porous sheet shutdown layer comprises applying the porous sheet shutdown layer to the porous inorganic nonelectroconductive coating and being trapped in a coil wound during battery fabrication.

Claim 21 (Previously presented): The process of claim 26,

wherein

a material for the porous sheet shutdown layer is at least one selected from the group consisting of polymers, polymer blends and natural and/or artificial waxes, and

the material has a melting temperature of less than 180°C.

Claim 22 (Previously presented): The process according to claim 21,

wherein the porous sheet shutdown material is polyethylene.

Claim 23 (Previously presented): A method for the production of a lithium battery comprising employing the separator of claim 25 as a separator in the lithium battery.

Claim 24 (Previously presented): A lithium battery comprising the separator of claim 25.

Claim 25 (Previously presented): An electrical separator for a lithium battery comprising:

a porous carrier;

a porous inorganic nonelectroconductive coating on a surface and in the pores of the porous carrier; and

a porous shutdown layer on the porous inorganic nonelectroconductive coating;

wherein

the porous carrier is nonelectroconductive and has a porosity greater than 50%,

the porous inorganic nonelectroconductive coating comprises particles of at least one selected from the group consisting of an oxide of Al, an oxide of Si and an oxide of Zr, the particles have an average particle size in the range from 0.5 to 10 μm, and in the porous inorganic nonelectroconductive coating the particles are adhered together by an oxide of Al, Si or Zr, and

the porous shutdown layer comprises a sheet of materials selected such that the shutdown layer will melt at a temperature determined as the shutdown temperature of the electrical separator.

Claim 26 (Previously presented): A process for producing the electrical separator for a lithium battery according to Claim 25, comprising:

preparing a suspension of inorganic nonelectroconductive particles in a sol;

applying the suspension to the surface and pores of a porous carrier to coat the carrier;

drying the coated carrier to form a porous inorganic nonelectroconductive coating on the surface and in the pores of the porous carrier; and

fixing on the porous inorganic nonelectroconductive coating a porous sheet shutdown layer;

wherein

the porous carrier is nonelectroconductive and has a porosity greater than 50%,

the inorganic nonelectroconductive particle comprises at least one oxide selected from the group consisting of an oxide of Al, an oxide of Si and an oxide of Zr,

the particles have an average particle size in the range from 0.5 to 10 μm,

the sol comprises a hydrolysis product of a compound of Al, Si or Zr, and

the porous sheet shutdown layer comprises materials selected such that the shutdown layer will melt at a temperature determined as the shutdown temperature of the electrical separator.